DATE: 28 August 1979

TO : Stanley N. Cohen
Chairman, Department of Genetics

FROM : Joshua Lederberg

SUBJECT: History of Funding of Facilities for the Genetics Department

Dear Stan:

This is a recapitulation of the attached documents which pertain to the funding of the Genetics Department facilities in the S building.

I was able to come to Stanford in 1959 to found the Department in large measure through the good will of the Departments of Biochemistry and Pharmacology, which helped make room in the M building for the original spawning of the department. I do not have any documentation on the funding of the M building, but am certain that the research programs of the Genetics Department were included in appropriate measure as justification for the grants from the Rockefeller Foundation and of the sources especially for the equiping of the building at that time. However, that can be thought of as belonging to the pre history of the present question.

The funding arrangements for the S building are most clearly documented in the application RC-1166 which was submitted to NIH in September 1962 for a matching construction grant. Page 12 shows a runout cost of 5.6 million dollars (net of the NASA supported construction (about 10,000 gross ft.^{2}) which, being already federally fully funded, had to be excluded from the calculation.) Of that total amount, $ 1 million each were secured from the Rockefeller Foundation and Joseph Kennedy Foundation; the remaining ½ million from general development funding of the university's campaign.

The Kennedy Foundation was well aware of the prospective matching grant, and in fact this was used as a substantial argument to them for the amount of leverage that their contribution would offer. The Kennedy Foundation grant of 1 million dollars is documented in Mr. Shrivers letter of January 4, 1962 and it makes clear that the entire building was expected to constitute "one of the nations most advanced facilities for medical research; in particular the third floor was to be designated as the Kennedy Laboratories for Molecular Medicine". As detailed in our applications to the Kennedy Foundation and in their response, our mutual expectation was that the Kennedy Laboratories would provide both a substratum of basic research in genetics and molecular biology and the interdigitation of these subjects with neurobiology and relevant aspects of pediatric research. The third floor space was then to be divided more or less evenly between the departments of genetics and pediatrics for these purposes with the expectation that research programs in the department of obstretrics would also be facilitated in so far as they could be related to the central purposes of the laboratory. The third floor was amply funded in its entirety by the Kennedy Foundation grant and the corresponding NIH matching money.

Separate from these considerations, we received a grant from NASA to the extent of $500,000 which was intended to cover the full expenses of construction totaling about 10,000 gross square feet - some of which was in the basement and some of which comprised designated laboratories on the third floor. To that extent, the space occupied by the Genetics Department on the 3rd floor was covered in part by NASA, in part by the Kennedy - NIH matching funding so that an even larger share of those dollars contributed to the general construction requirements of the entire building! The grant of the Rockefeller Foundation was also motiviated by the support that would be given to the programs of the Genetics department; and to that extent that is still an additional credit beyond what is already mentioned to the role of the department in attracting funding for its facilities.

I do not believe there can be any doubt about the extent to which the activities of the Genetics Department have fully corresponded to the expectations laid upon us by our donors and by our own representations. The department, through Dr. Levinthal's work and my own, made important contributions to NASA's missions in planatery biology. In addition, the bioengineering efforts, that were a further motive that NASA clearly expressed in its grant, have been reflected in such successful programs as the development of the ACME and then later the SUMEX computer systems, and of the FACS cell sorter instrumentation. We initiated research programs in chemical neurobiology with the appointment of Professor Eric Shooter within the Genetics Department, a seed which has eventually flowered in the development of the autonomous department which he now leads. Every other research program of the department of genetics has contributed directly to the development of molecular biology and molecular medicine which was our promise to the Kennedy Foundation.

We understood from the very beginning that we had the responsibility to be helpful to the development of research activities of neighboring departments and can be said to have contributed extensively in many ways, including the relaxation of space to such departments as Radiology, Medicine and Pediatrics so that the space finally left to the operations of members of the Genetics department remains even less than originally spoken for in the aforementioned applications.

(It might be mentioned further that the "glass box" that houses the SUMEX computer was originally fully funded by the Macy Foundation in order to house the ACME computer system which was the immediate predecessor to SUMEX.)

Nor, given the very substantial volume of research funding by any measure, per square foot or per capita, can the department be regarded as having contributed less than its pro rata share of indirect cost recovery through fully funded grants.

It is not the place here to comment on the performance of other departments in responding to these goals. It would be inappropriate for there to be too rigid a calculus that fails to take account of changes in the environment; and to the extent that space is used for the basic and clinical research functions that were the primary justification for constructing this building - it would serve no useful purpose to insist on more narowly defined compliance. All of our donors surely had in mind to further the serious intellectual collaboration of the respective departments in pursuing important biomedical research goals and this would weigh more heavily than specific continuity.

Regardless of the inexorable pressures on the functions and integrity of a medical shcool, I hope that the environment will continue to nurture, and perhaps do even better to further that style of research that was the noble ideal of the Stanford Medical School when it was re-established in 1959.